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PRELIMINARY ASSESSMENT/ VISUAL SITE INSPECTION

HENRY VALVE COMPANY
MELROSE PARK, ILLINOIS
ILD 005 071 741

FINAL REPORT

Prepared for

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Waste Programs Enforcement
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EXECUTIVE SUMMARY

B&V Waste Science and Technology Corp. (BVWST) performed a preliminary assessment and visual site inspection (PA/VSI) to identify and assess the existence and likelihood of releases from solid waste management units (SWMU) and other areas of concern (AOC) at the Henry Valve Company facility (Henry Valve) in Melrose Park, Illinois. This summary highlights the results of the PA/VSI and the potential for releases of hazardous wastes or hazardous constituents from the SWMUs and AOCs identified. In addition, a completed U.S. Environmental Protection Agency (EPA) Preliminary Assessment Form (EPA Form 2070-12) is included in Attachment A to assist in prioritization of RCRA facilities for corrective action.

The Henry Valve facility manufactures various types of valves and fittings, mainly for use in the refrigeration and air conditioning industry. The facility generates and manages the following waste streams: methylene chloride still bottoms (F001), spent acids (D002), acidic wastewater (D002), filtered solids (currently non-hazardous), waste paint (D001), waste oils (non-hazardous) and metal (brass, copper, steel, and stainless steel) chips. Henry Valve has operated at its current location under self-ownership since 1949. The facility occupies 3.8 acres in an industrial use area and employs 205 people. The facility's current regulatory status is large-quantity generator. In December 1986, the Part A application of the facility was withdrawn by the Illinois Environmental Protection Agency (IEPA) after Henry Valve's completion of closure activities of the area surrounding a 2,000-gallon holding tank. BVWST found no record of any remedial activity at the facility.

The PA/VSI identified the following seven SWMUs and one AOC at the facility:

Solid Waste Management Units

1. Degreaser tank
2. Waste storage area
3. Drum storage area #1
4. Drum storage area #2
5. Drum storage area #3
6. Wastewater treatment system
7. Waste paint area

Area of Concern

1. Machine oil tank

The potential for release from SWMUs to ground water, surface water, air and soils is low because all active SWMUs are located indoors and wastes are stored on the concrete floor of the facility for less than 90 days. The concrete is in good condition, with only hairline cracking. The only area of concern (AOC 1) is an underground machine oil tank, that has a moderate potential for release to on-site subsurface soils because it is over 35 years old. This tank is slated for removal after Henry Valve develops a closure plan and it is approved by IEPA. Floor drains to the sanitary sewer are located within 100 feet or less of all SWMUs. However, no drains are located within the areas occupied by SWMUs.

BVWST recommends monitoring the removal of the underground machine oil tank (AOC 1) to ensure that it is performed in compliance with an IEPA-approved closure plan.

Henry Valve is within one-quarter of a mile of residences and schools. Drinking water for Melrose Park and surrounding areas is supplied by Lake Michigan; therefore, it is likely that no drinking water wells are in use near the facility. Wells within 0.5 mile of the facility are used for industrial water supplies. Silver Creek is the nearest surface water body. It is approximately 0.5 mile away and is used for industrial purposes. The Des Plaines River is located about 2 miles to the southeast of the facility, and it is used for industrial and recreational purposes. Sensitive environments are not located on site. The nearest wetland area is the Des Plaines River, about 2 miles southeast of the facility. Facility access is controlled during operating hours by keeping entrances locked. During non-operating hours, the facility is secured by an alarm system.

1.0 INTRODUCTION

PRC Environmental Management, Inc. (PRC), received Work Assignment No. C05087 from the U.S. Environmental Protection Agency (EPA) under Contract No. 68-W9-0006 (TES 9) to conduct preliminary assessments (PA) and visual site inspections (VSI) of hazardous waste treatment and storage facilities in Region 5. As a team member with PRC under the TES 9 contract, B&V Waste Science and Technology Corporation (BVWST) conducted the PA/VSI for the Henry Valve Company (Henry Valve) facility.

As part of the EPA Region 5 Environmental Priorities Initiative, the RCRA and CERCLA programs are working together to identify and address RCRA facilities that have a high priority for corrective action using applicable RCRA and CERCLA authorities. The PA/VSI is the first step in the process of prioritizing facilities for corrective action. Through the PA/VSI process, enough information is obtained to characterize a facility's actual or potential releases to the environment from solid waste management units (SWMU) and areas of concern (AOC).

A SWMU is defined as any discernible unit at a RCRA facility in which solid wastes have been placed and from which hazardous constituents might migrate, regardless of whether the unit was intended to manage solid or hazardous waste.

The SWMU definition includes the following:

- RCRA-regulated units, such as container storage areas, tanks, surface impoundments, waste piles, land treatment units, landfills, incinerators, and underground injection wells.
- Closed and abandoned units.
- Recycling units, wastewater treatment units, and other units that EPA has generally exempted from standards applicable to hazardous waste management units.
- Areas contaminated by routine and systematic releases of wastes or hazardous constituents. Such areas might include a wood preservative drippage area, a loading-unloading area, or an area where solvent used to wash large parts has continually dripped onto soils.

An AOC is defined as any area where a release to the environment of hazardous waste or constituents has occurred or is suspected to have occurred on a nonroutine and nonsystematic

basis. This includes any area where such a release in the future is judged to be a strong possibility.

The purpose of the PA is as follows:

- Identify SWMUs and AOCs at the facility.
- Obtain information on the operational history of the facility.
- Obtain information on releases from any units at the facility.
- Identify data gaps and other informational needs to be filled during the VSI.

The PA generally includes review of all relevant documents and files located at state offices and the EPA Region 5 office in Chicago.

The purpose of the VSI is as follows:

- Identify SWMUs and AOCs not discovered during the PA.
- Identify releases not discovered during the PA.
- Provide a specific description of the environmental setting.
- Provide information on release pathways and the potential for releases to each medium.
- Confirm information obtained during the PA regarding operations, SWMUs, AOCs, and releases.

The VSI includes interviewing appropriate facility staff, inspecting the entire facility to identify all SWMUs and AOCs, photographing all visible SWMUs, identifying evidence of releases, initially identifying potential sampling parameters and locations, if needed, and obtaining all information necessary to complete the PA/VSI report.

This report documents the results of a PA/VSI of the Henry Valve facility in Melrose Park, Illinois. The PA was completed on January 24, 1992. BVWST gathered and reviewed information from the Illinois Environmental Protection Agency (IEPA) and from EPA Region 5 RCRA files. The VSI was conducted on January 27, 1992. It included interviews with facility

representatives and a walk-through inspection of the facility. Seven SWMUs and one AOC were identified at the facility.

BVWST completed EPA Form 2070-12 using information gathered during the PA/VSI. This form is included in Attachment A. The VSI is summarized and 11 inspection photographs are included in Attachment B. Field notes from the VSI are included in Attachment C.

2.0 FACILITY DESCRIPTION

This section describes the facility's location, past and present operations (including waste management practices), waste generating processes, history of documented releases, regulatory history, environmental setting, and receptors.

2.1 FACILITY LOCATION

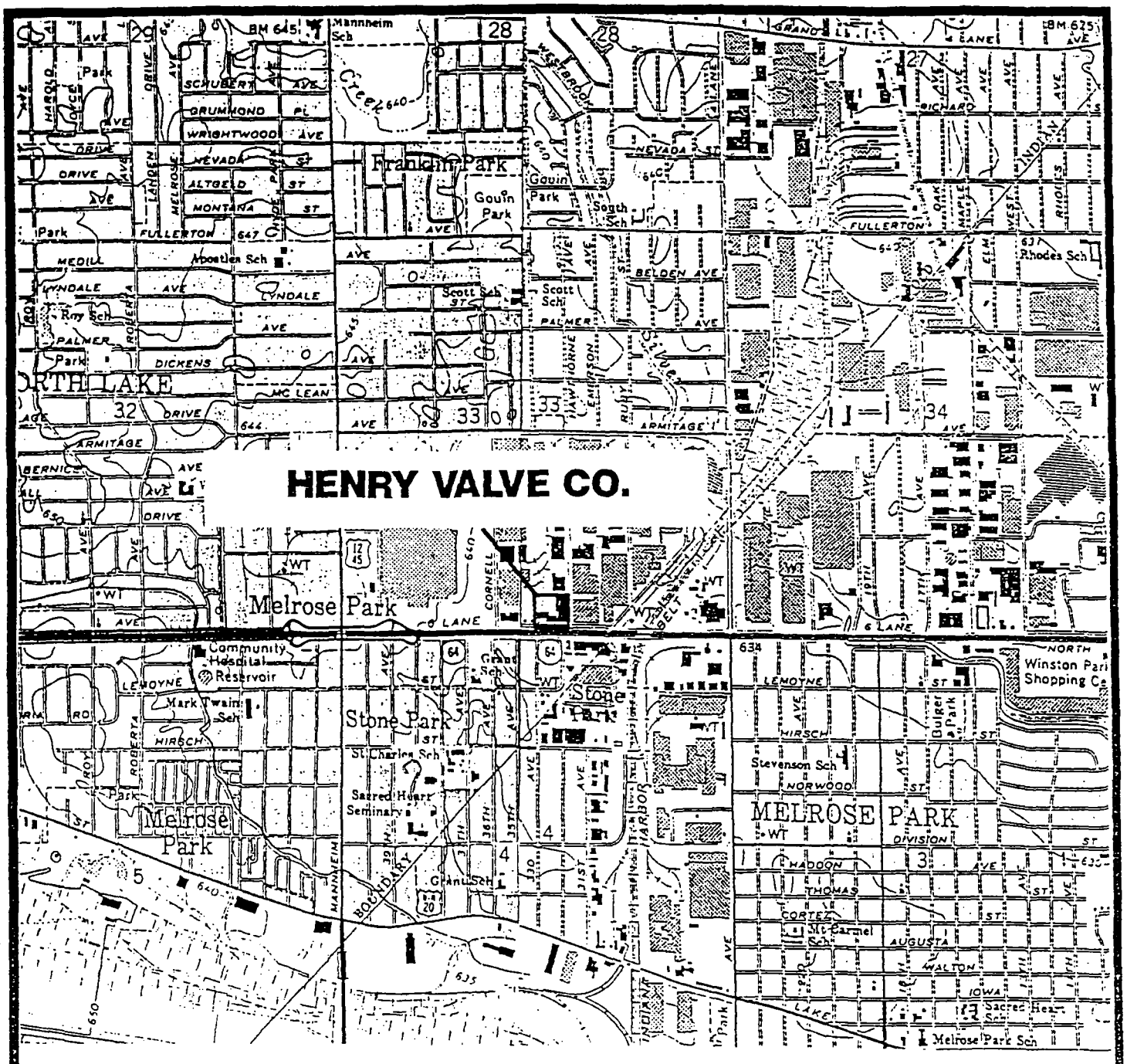
Henry Valve is located at 3215 North Avenue in Melrose Park, Cook County, Illinois (latitude 41° 54' 29" N and longitude 87° 52' 38" W), as shown in Figure 1. The facility occupies 3.8 acres in an industrial area.

Henry Valve is bordered on the north by Peerless Industries, on the west by vacant land and Goodman Furniture Company, on the south by the small businesses on North Avenue, and on the east by Golden Dipt Food Processing on Hawthorne Avenue.

2.2 FACILITY OPERATIONS

Henry Valve manufactures various types of valves and fittings, mainly for use in the refrigeration and air conditioning industry. The facility receives brass, steel and stainless steel rods and castings, copper tubing, machining oil, solvents and acids as raw materials. Metal rods and castings are stored indoors, near the machining area. Machining oil, received both in drums and bulk deliveries, is stored in drums on an indoor concrete slab and in a 1,500-gallon underground tank. Solvents and acids are received in drums and are stored on indoor concrete slabs.

The facility operations consist of machining, assembling and storing of valves and fittings. Metal rods and castings undergo milling, drilling, and turning operations on a variety of equipment. A methylene chloride vapor degreaser then removes machining oils. Parts requiring painting are washed in an acid bath. Painting is accomplished using spray paint booths, but a powder paint system will replace this method later this year. Clean and dry parts undergo manual and machine assembly. Completed valves and fittings are then stored on site until they are delivered to clients.



Source: Modified from USGS, 1972.
River Forest and Elmhurst Quadrangles.

Henry Valve Co.
Melrose Park, Illinois

PA/VSI

FIGURE 1
FACILITY LOCATION

SCIENCE AND TECHNOLOGY CORP.

The facility has operated at its current location since 1949 and employs 205 people. The facility consists of one building and two parking lots. The building occupies 2.1 acres on 3.8 acres of land. Paved parking lots cover nearly all the remaining property.

Wastes are stored indoors on the concrete floor of the facility in drums (SWMU 2) and in one tank (SWMU 1) and are removed in less than 90 days. Waste rinsewater from parts washing is treated to adjust pH and to recover copper solids. The effluent from this unit (SWMU 6) is discharged to the sanitary sewer. Metal chips from machining are stored in drums and bins in SWMU 2 and are picked up for recycling. In the past, some additional areas (SWMUs 3, 4, and 5) were used to store drums of hazardous waste for periods of less than 90 days. These areas are no longer used to store wastes; however, SWMU 4 is used to store empty drums until they are picked up for recycling.

Facility SWMUs are identified in Table 1. The facility layout, including SWMUs and AOC, is shown in Figure 2. Since 1949, Henry Valve has produced valves and fittings at this location. According to facility personnel, the facility has been owned and operated by Henry Valve since 1949, and there is no record of any prior site activity.

2.3 WASTE GENERATING PROCESSES

The primary waste streams generated at the Henry Valve facility are methylene chloride still bottoms (F001), spent acids (D002), acidic wastewater (D002), filtered solids, waste paint (D001), waste oils, and metal chips. These wastes are generated during the degreasing of machined parts, cleaning of painting equipment, washing of parts and machining of metal rods and castings. Wastes generated at the facility are discussed below and are summarized in Table 2. Generation rates presented are based on 1991 waste generation data.

Removing machining oils from machined parts is accomplished by a vapor degreaser. Methylene chloride is heated in a still and the vapor condenses on the cooled parts. The methylene chloride/oil mixture drips back into the still and the methylene chloride is recycled. This process generates an oily liquid still bottom containing methylene chloride (F001), which is accumulated in the 200-gallon degreaser tank (SWMU 1) and is stored in drums in SWMU 2. A maximum of 10 drums of this waste is generated every three months. This waste is transported off site by Mr. Frank Inc. to Petro Chem Processing, Detroit, Michigan (MDNR, 1991).

TABLE 1

SOLID WASTE MANAGEMENT UNITS (SWMU)

SWMU Number	SWMU Name	RCRA Hazardous Waste Management Unit*	Status
1	Degreaser Tank	No	Active, less than 90 day storage of hazardous wastes.
2	Waste Storage Area	No	Active, less than 90 day storage of hazardous wastes.
3	Drum Storage Area #1	No	Inactive, less than 90 day storage of hazardous wastes.
4	Drum Storage Area #2	No	Inactive, less than 90 day storage of hazardous wastes.
5	Drum Storage Area #3	No	Inactive, less than 90 day storage of hazardous wastes.
6	Wastewater Treatment System	Yes **	Active, less than 90 day storage of hazardous wastes.
7	Waste Paint Area	No	Active, less than 90 day storage of hazardous wastes.

Notes:

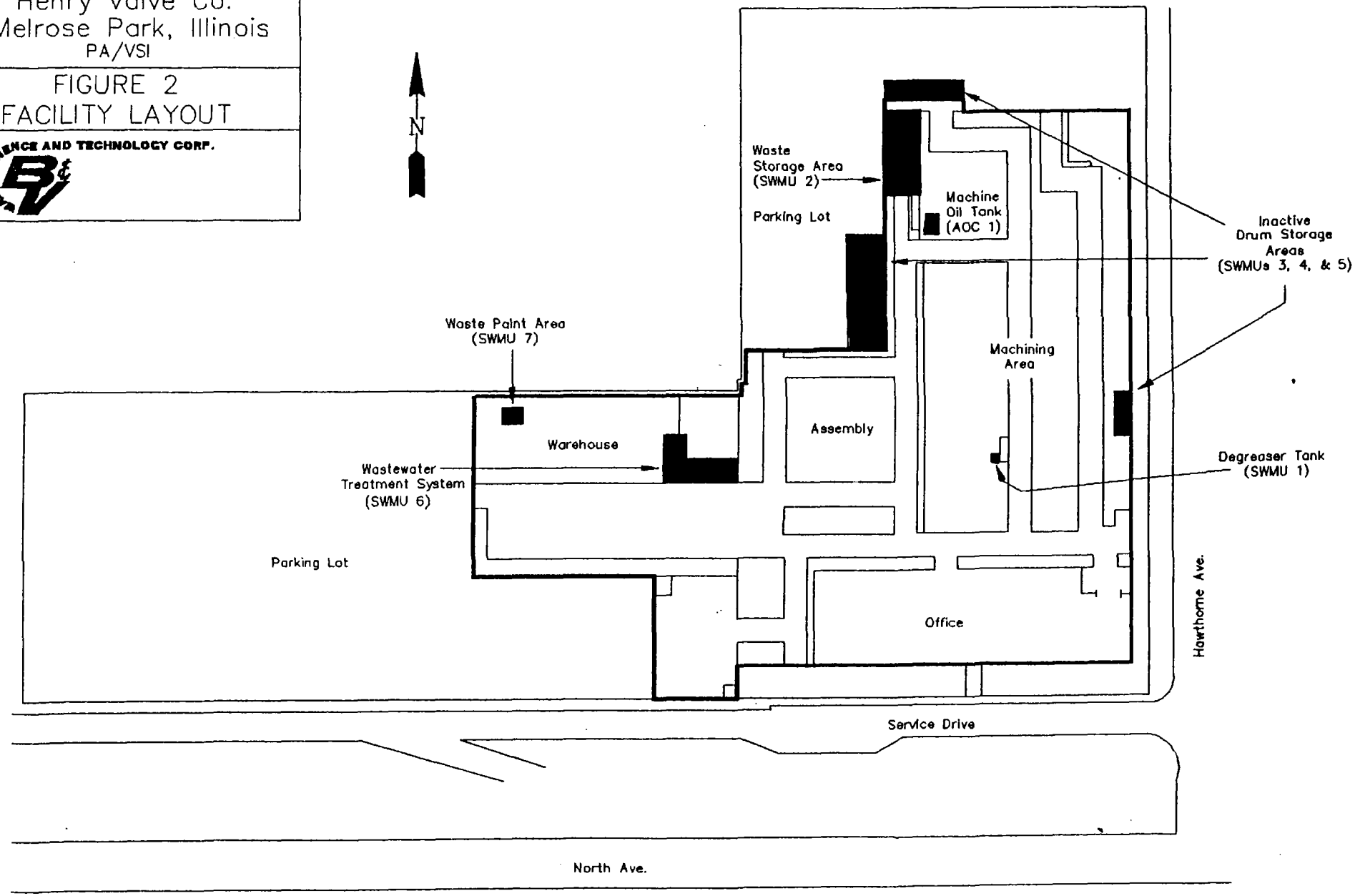
* A RCRA hazardous waste management unit is one that requires or formerly required submittal of a RCRA Part A or Part B permit application.

** The 2,000-gallon holding tank used to collect rinsewater underwent RCRA closure in 1986. No other closure activities were necessary to withdraw the Part A application (IEPA, 1986b).

Henry Valve Co.
Melrose Park, Illinois
PA/VSI

FIGURE 2
FACILITY LAYOUT

BATTELLE SCIENCE AND TECHNOLOGY CORP.



Source: Modified from Henry Valve Co., 1992

TABLE 2

SOLID WASTES

Waste/EPA Waste Code	Source	Primary Management Unit*
Methylene chloride still bottoms/F001	Degreasing	1, 2, 3
Spent acids (hydrochloric, sulfuric, nitric)/D002	Parts washing	2
Acidic rinsewater/D002	Parts washing	6
Filter cake/NA **	Parts washing	6
Waste paint/D001	Painting	2, 4, 7
Metal chips (brass, copper, steel, stainless steel)/NA **	Machining	2
Waste Oils/NA **	Machining	2
Spent 1,1,1-trichloroethane/F001	Degreasing	5

Notes:

* Primary management unit refers to a SWMU that manages or formerly managed the waste.

** Nonapplicable (NA) designates non-hazardous waste.

Parts destined for painting are washed in a seven-stage parts washer that generates acidic rinsewater (D002) and spent hydrochloric acid (D002). When the wastewater treatment system (SWMU 6) is operational, the rinsewater (D002) is treated before it is discharged to the Metropolitan Water Reclamation District of Greater Chicago (MWRDGC). The pH of the rinsewater is adjusted by adding acid or caustic solutions to maintain a pH between 5 and 10. Solids are settled out and pressed into a filter cake, which is classified as a non-hazardous special waste. This classification is based on analysis by Chemical Waste Management, Inc. (Henry Valve, 1992) The filter cake is accumulated in a bin next to the filter press. When the bin is full, filter cake is transferred to one-cubic-yard cardboard containers and stored on the concrete floor of the facility near SWMU 2. The filter cake has been classified as a non-hazardous special waste since late 1991, and pending IEPA approval, it will be removed by Material Service Corporation for landfilling. About six cubic yards of this waste are generated per year. Spent acids (D002) are generated at a rate of about 10 drums every three months. Drums are stored for less than 90 days in SWMU 2 and are transported by Mr. Frank Inc. to Clean Harbors of Chicago, Illinois (Henry Valve, 1991).

SWMU 6 was shut down and the discharge to the MWRDGC was stopped from December 1991 until February 1992, when copper levels in the treated effluent from SWMU 6 exceeded MWRDGC standards (Scientific Control Laboratories, 1991). The unit is active and discharges effluent in compliance with MWRDGC standards (Scientific Control Laboratories, 1992). During the shut down period, acidic rinsewater (D002) was collected in the 2,000-gallon holding tank which is part of SWMU 6 and was hauled away for treatment in a tanker truck by Mr. Frank Inc. to Envirite Corporation of Harvey, Illinois (Henry Valve, 1991).

Painting operations generate waste paint (D001) containing lacquer thinner. Spray-painting booths are continuously washed with water. The waste paint (D001) and water mixture collects in a tub and is separated using a coagulant. The paint sludge is then filtered from the water, and the water is recycled. The solidified waste paint accumulates in a drum adjacent to the booths. One to two drums of waste paint (D001) accumulate per month in the waste paint area (SWMU 7). The drums are taken by Mr. Frank Inc. to Petro Chem Processing in Detroit, Michigan (MDNR, 1991). This waste will no longer be generated after a powder painting system replaces all painting operations later this year. The powder painting method is not expected to generate any waste.

Machining equipment at the facility uses oils for lubrication and coolant. Waste lubrication oils are generated at a rate of about 20 drums per year. The drummed waste oil is stored in the drum storage area (SWMU 2), and is taken off site by Mr. Frank Inc. to Petro Chem Processing in Detroit for recycling. Waste coolant oils are generated at a rate of about 550 gallons per month, and are recycled on site by Norros Corporation. Neither of these oils is classified as a hazardous waste.

During machining of metal parts, chips of brass, copper, steel, and stainless steel are generated at a rate of several hundred pounds per day. The chips are stored in open drums and bins, according to metal type. The containers, located throughout the machining area, are brought to SWMU 2 when full. Full containers are picked up for recycling by Fred Doppelt Co. of Glenview, Illinois. Removal of these non-hazardous chips occurs at least once a week.

By 1991, the generation of three hazardous wastes was discontinued. Changes in production processes have eliminated the following waste streams: spent 1,1,1-trichloroethane (F001), spent Shell Sol 340 (F003), and spent chromic acid (D007). The installation of the methylene chloride vapor degreaser in 1986 gradually replaced the use of 1,1,1-trichloroethane for removing machining oils from parts. Two to three drums of spent 1,1,1-trichloroethane (F001) were accumulated per month, stored for less than 90 days in SWMU 2, and taken by Mr. Frank Inc. to Petro Chem Processing in Detroit, Michigan (MDNR, 1991). Annual cleaning of machinery generated about 40 drums per year of spent Shell Sol 340, a mixture of F003 solvents. By flushing machinery frequently with fresh oil, this cleaning became unnecessary. This F003 waste was stored in SWMU 2 and taken to Petro Chem Processing of Detroit, Michigan for recycling. The parts washer formerly used chromic acid in the paint preparation process. This process generated approximately 10 drums every three months of spent chromic acid (D002, D007). This waste, which was drummed and stored in SWMU 2 for less than 90 days, was hauled to Clean Harbors of Chicago, Illinois, for treatment (Henry Valve, 1991).

2.4 HISTORY OF DOCUMENTED RELEASES

This section discusses the history of documented releases to ground water, surface water, air, and on-site soils at Henry Valve.

Review of the IEPA and EPA files and interviews with facility representatives revealed no documented releases to ground water, surface water, air or on-site soils at the Henry Valve facility. No releases were noted by BVWST during the VSI.

2.5 REGULATORY HISTORY

BVWST found no record of Henry Valve submitting a notification of hazardous waste activity form to EPA. However, the facility did submit a RCRA Part A permit application on November 17, 1980 (Henry Valve, 1980). This application listed the following codes and capacities: container storage (S01), 1,375 gallons; and tank storage (S02), 4,000 gallons. The application listed the following wastes: spent halogenated solvents (F001) used in degreasing, 11,500 pounds; and 1,260 pounds of another waste, but no name was entered in the appropriate space.

The facility representative who completed the Part A application is no longer employed by Henry Valve, but facility representatives offered their best explanation of what the entries on the application were intended to represent. The container storage (S01) referred to drum storage, although the exact location of the storage area was not specified on the map included with the application. The tank storage (S02) referred to the 2,000-gallon holding tank that is part of the wastewater treatment system (SWMU 6) and may have mistakenly included a 1,500-gallon machine oil tank and a 500-gallon acid tank, both used for product only. They were the only other tanks on site at the time. The F001 code referred to spent 1,1,1-trichloroethane, and the blank waste code most likely referred to spent acid.

The Part A application was withdrawn by the IEPA in December 1986 (IEPA, 1986b), after completion of closure activities consistent with an IEPA-approved closure plan (Gabriel and Associates, 1986). To be removed from the list of treatment, storage and disposal facilities, the facility was required to decontaminate the area surrounding the wastewater treatment system (SWMU 6), where spent chromic acid (D002, D007) was stored in a holding tank for more than 90 days. The concrete floor was steam-cleaned and wipe tested. Although the facility declared container storage in their RCRA Part A application, facility personnel indicated that no wastes were stored in drums for more than 90 days. Therefore, no other closure activities were necessary for the facility to withdraw its Part A application.

The spent chromic acid (D007) solution was pumped from the holding tank of the wastewater treatment system and tank decontamination was not required. Operation of the system remains the same except waste is stored less than 90 days (Gabriel and Associates, 1986). The facility currently operates as a large-quantity generator, storing wastes for less than 90 days.

In the past, the Henry Valve facility has had some minor RCRA compliance problems. The IEPA inspection reports; dated March 1982 and November 1986, cited violations concerning administrative procedures dealing with the waste analysis plan, inspection schedule, training records, contingency plans, closure plans, labeling drums, and record keeping (IEPA, 1982a, 1986a). As a result of the 1982 inspection, an IEPA warning letter directed the facility to correct administrative deficiencies pursuant to 40 CFR 265 (IEPA, 1982b). No enforcement action was taken as a result of the 1986 inspection. There is no record of any outstanding violations.

The facility is required to have air permits for several pieces of equipment. The facility has operating permits for the methylene chloride vapor degreaser, natural gas-fired boilers, the scrubber used in the parts-washing area, spray paint booths, and a powder paint system (IEPA, 1989a, 1989b). The proposed powder paint system will replace the spray paint booths later this year (Henry Valve, 1992). The facility has no history of air compliance problems or odor complaints from area residents.

The facility is not required to have a National Pollutant Discharge Elimination System (NPDES) permit. The facility has a permit from the Metropolitan Water Reclamation District of Greater Chicago (MWRDGC) to discharge treated wastewater from the parts cleaning operations (MWRDGC, 1991). Sampling analysis of the wastewater from December 1991 showed levels of copper to be 47 mg/l, which exceeds the 3 mg/l limit set by MWRDGC (Scientific Control Laboratories, 1991). The facility was directed by the MWRDGC to correct the problem and discontinue discharge from the wastewater treatment system (SWMU 6) until the effluent copper levels were at or below 3 mg/l. In February 1992, copper levels in the effluent returned to acceptable levels and SWMU 6 became active (Henry Valve, 1992).

2.6 ENVIRONMENTAL SETTING

This section describes the climate, flood plain and surface water, geology and soils, and ground water near the Henry Valve facility.

2.6.1 Climate

The facility is 10 miles west of downtown Chicago, Illinois. Climatic data for the City of Chicago was collected for the last 32 years, through 1990, by the National Weather Bureau at O'Hare Airport. Average daily maximum temperature is 58.7 F and average daily minimum temperature is 39.7 F. Annual precipitation averages 33.34 inches, and the greatest twenty-four hour rainfall has been 9.35 inches, recorded in August 1987. The average wind speed is 10.3 mph. The prevailing wind is from the west in winter, from the west and south-southwest in the spring, from the southwest in summer, and from the south-southwest in the fall (National Weather Bureau, 1990).

2.6.2 Flood Plain and Surface Water

Surface water drainage at the facility is generally to the northeast, toward Silver Creek. The nearest surface water body, Silver Creek, is 0.5 mile northwest of the facility and is used for industrial purposes. This surface water body discharges to Des Plaines River, about 2 miles southeast of the site. The Des Plaines River is the nearest surface water body used for recreational purposes.

According to the Federal Emergency Management Agency floodplain map of Melrose Park (January 18, 1984, panel number 170125 0002), the facility lies within the 100-year floodplain of the Des Plaines River system (FEMA, 1991).

2.6.3 Geology and Soils

No site-specific geological information is available for the site. Well logs from wells within 1 mile of the facility were the source for the following local geological information. Of 85 wells within 1 mile of the facility, only five well logs contained detailed geological information (ISWS, 1992). Although layers were found to be consistent in classification, depths and thickness of layers were found to vary slightly among wells. The following depths and thicknesses are estimates based on those shown in local well logs.

Pleistocene age deposits consist of a 55- to 80-foot layer of clay overlaying bedrock. Silurian age bedrock consists of Niagaran and Alexandrian dolomite to a depth of approximately

400 feet. Ordovician age bedrock consists of Maquoketa shale, Galena-Platteville dolomite and St. Peter sandstone to a depth of approximately 1,000 feet. The Cambrian-Ordovician age bedrock consists of Oneata and Jordan dolomite to about 1,100 feet. Cambrian age bedrock includes Trempealeau dolomite from 1,100 to 1,300 feet; Franconia sandstone and shale from 1,300 to 1,400 feet, Galesville sandstone from 1,400 to 1,550 feet; and Eau Claire dolomite and sandstone from 1,550 to 1,900 feet.

Much of Cook County has not been mapped at a detailed level by the U.S. Department of Agriculture because of urban land use (USDA, 1979). However, the report supplies a regional soil map that classifies the near-surface soil near the facility as almost level, poorly drained soil resulting from the deposition of clay and silt in a glacial lake.

2.6.4 Ground Water

No site-specific hydrogeological information is available. Therefore, no statements may be made regarding the depth to the water table, ground-water flow rates or flow directions, the stratigraphic position of aquifers beneath the site, or the possible interaction of ground water and surface water at the adjacent river. Regional information is provided.

In the northeastern Illinois region, ground water is obtained from four major aquifer systems: the glacial drift system, the shallow bedrock system, and two deep bedrock systems. They are distinguished by their hydrologic properties and recharge source areas (Hughes et al, 1966). In central Cook County, the glacial drift is thin, and sand and gravel deposits are correspondingly thin or absent. Virtually all wells penetrate deep bedrock aquifers (Bergstrom et al., 1955).

The shallow bedrock aquifer system in northeastern Illinois underlies the glacial drift system and is mainly comprised of Silurian dolomite formations. The upper boundary of this system is the bedrock-drift contact, and the lower boundary is the upper Ordovician Maquoketa Shale. Water from this aquifer is obtained from fractures and solution openings in the Silurian dolomite beds (Hughes et al., 1966). The shallow bedrock aquifer system receives some recharge locally from precipitation (Hughes et al., 1966).

The deep bedrock aquifer systems include the Cambrian-Ordovician aquifer system and the Mt. Simon aquifer system. The Cambrian-Ordovician aquifer system contains two major

aquifers: the Glenwood-St. Peter aquifer and the Ironton-Galesville aquifer. The top of the Cambrian-Ordovician aquifer system is the Galena-Platteville Dolomite. The Glenwood-St. Peter aquifer is widely used where water requirements are less than 200 gallons per minute (gpm). This unit has a hydraulic conductivity between 9 and 15 gallons per day per square foot (gpd/sq. ft.). The Ironton-Galesville Sandstone aquifer has a hydraulic conductivity between 30 and 40 gpd/sq. ft. Recharge to the deep bedrock aquifer systems is mostly from west and north of the six county metropolitan area, where rocks crop out at the surface or lie immediately below the glacial drift. Minor recharge occurs as leakage through the shallow bedrock aquifer system (Hughes et al., 1966).

The Mt. Simon aquifer system is bounded above by the relatively impermeable shales and siltstones of the upper and middle Eau Claire Formation and below by pre-Cambrian basement rock. The average hydraulic conductivity of the aquifer system is 16 gpd/sq. ft. (Hughes et al., 1966) and recharge is largely from the outcrop region of Cambrian rocks in central southern Wisconsin (Wilman, H.B., 1971).

2.7 RECEPTORS

The Henry Valve facility occupies 3.8 acres in an industrial area in Melrose Park, Illinois, which has a population of about 25,000.

Henry Valve is bordered on the north by Peerless Industries, on the west by vacant land and Goodman Furniture Company, on the south by the small business on North Avenue, and on the east by Golden Dipt Food Processing on Hawthorne Avenue. The nearest school, Grant School, is located about 1,500 feet south and west of the facility. Access to the facility is limited to authorized personnel during the operating hours of 6 a.m. to 1 a.m. During non-operating hours, the facility is locked and monitored by an alarm system. The parking lot area and property borders are not fenced.

The nearest surface water body, Silver Creek, is 0.5 mile east of the facility and is used for industrial purposes. Other surface water bodies in the area include the Des Plaines River which is about 2 miles to the southeast and is used for recreation; and Lake Michigan, which is about 10 miles to the east. Lake Michigan is the closest surface water body used for drinking water.

Ground water is not used as a drinking water supply. Lake Michigan has provided a municipal water supply to Melrose Park since the early 1940s and there is no record of anyone currently using ground water for drinking purposes (Village of Melrose Park, 1992). All wells within 1 mile of the facility penetrate bedrock aquifers (ISWS, 1992). The nearest industrial water well is approximately 0.5 mile east of the facility.

Sensitive environments are not located on site. The nearest wetland area is the Des Plaines River, about 2 miles southeast of the facility. There are no critical habitats, or state or national parks within 2 miles of the facility (USGS, 1972).

3.0 SOLID WASTE MANAGEMENT UNITS

This section describes the seven SWMUs identified during the PA/VSI. The following information is presented for each SWMU: description of the unit, dates of operation, wastes managed, release controls, history of documented releases, and BVWST observations. Figure 2 shows the SWMU locations.

SWMU 1 **Degreaser Tank**

Unit Description: The degreaser tank is indoors, in the machining area, adjacent to the methylene chloride vapor degreaser. The unit collects and stores the machining oil/methylene chloride (F001) sludge that is generated by the vapor degreaser. The tank is emptied into drums about once per month when it is nearly full. The unit is a 200-gallon plastic above-ground tank that rests on the concrete floor of the facility (See Photograph No. 1). There are no drains in the immediate area, although there are sanitary sewer drains within the building (Huff & Huff, 1987).

Date of Startup: The unit began operation in 1986.

Date of Closure: The unit is active.

Wastes Managed: This unit manages still bottoms from the methylene chloride degreaser, which contain machining oils and spent methylene chloride (F001). Wastes from this unit are ultimately drummed and stored in SWMU 2, the active drum storage area, until they are picked up for disposal.

Release Controls: There is a manually operated sprinkler system with spray heads located throughout the facility and spill cleanup equipment, including absorbant, located in the machining area (Huff & Huff, 1987).

History of Documented Releases:	No releases from this SWMU have been documented.
Observations:	The 200-gallon unit was approximately one-third full of methylene chloride still bottoms (F001) during the VSI. The unit appeared to be in good condition and the concrete floor beneath it had no cracks. No evidence of release was noted.
SWMU 2	**Waste Storage Area**
Unit Description:	The waste storage area is indoors in the northwest corner of the building near a large roll-up doorway. The unit is used to store drums of hazardous and non-hazardous waste and bins of metals for recycling. The hazardous waste is stored for less than 90 days. The unit measures approximately 30 feet by 75 feet and is made of concrete. There are no drains in the area (See Photographs 2 and 3).
Date of Startup:	The startup date of the unit is unknown, but prior to 1980.
Date of Closure:	The unit is active.
Wastes Managed:	The unit manages drummed wastes consisting of methylene chloride still bottoms (F001), waste paint (D001), spent acids (D002), and waste oils (non-hazardous). Bins and drums of waste metals (brass, copper, steel, stainless steel) are also stored in this unit. The unit has managed drums of spent 1,1,1-trichloroethane (F001), mixed spent F003 solvents, and spent chromic acid (D002, D007). Wastes from this unit are picked up by a licensed waste hauler and taken away for recycling, treatment, or disposal.
Release Controls:	The unit has no floor drains. The machining area has spill cleanup equipment. The unit is bordered by a brick wall on the east and a concrete curb that surrounds the west and north portions. The south portion is open to the rest of the building.

History of Documented Releases: No releases from this SWMU have been documented.

Observations: The unit contained eight drums of hazardous waste at the time of the VSI. These drums were filled with the last of the mixed spent F003 solvents and spent 1,1,1-trichloroethane (F001) and some waste oils (nonhazardous). Open drums and bins, containing metal chips (brass, copper, steel, and stainless steel) were present. The concrete floor was in good condition, with only minor cracking. No evidence of release was observed.

SWMU 3 **Drum Storage Area #1**

Unit Description: This unit is east of the vapor degreaser, adjacent to the eastern wall of the facility. The size of this area is unknown, but a 1986 IEPA inspection noted the storage of six drums of methylene chloride still bottoms (F001). The unit was not declared in the facility's Part A application, and no further information about the unit was found. (See Photograph 4).

Date of Startup: The startup date of this unit is unknown.

Date of Closure: This area has been inactive for at least 2 years.

Wastes Managed: The unit managed methylene chloride still bottoms (F001), which was picked up by a licensed waste hauler and taken away for disposal.

Release Controls: The unit has no secondary containment. Storm sewer drains are within 50 feet of this unit (Huff & Huff, 1987).

History of Documented Releases: No releases from this SWMU have been documented.

Observations:	The unit contained six drums of methylene chloride still bottoms (F001) during an IEPA inspection (IEPA, 1986a). During the VSI on January 27, 1992, there was no hazardous waste in the unit, and it contained wooden pallets and other non-hazardous products. There was no evidence of release and the concrete was in good condition.
SWMU 4	**Drum Storage Area #2**
Unit Description:	The unit is located outdoors, adjacent to the northwestern corner of the building wall. Drums of waste paint (D001) and spent F003 solvents were stored in the unit. The unit is made of concrete and measures about 20 feet by 60 feet. The unit was not declared in the facility's Part A application, and no further information was found. (See Photograph 5).
Date of Startup:	The startup date of this unit is unknown.
Date of Closure:	This area has been inactive for at least 2 years.
Wastes Managed:	The unit managed drums of waste paint (D001) and spent F003 solvents more than 2 years ago. These wastes were picked up for disposal by a licensed waste hauler. The unit is used to store empty drums until they are picked up for recycling.
Release Controls:	The unit has a 1-foot concrete containment curb surrounding it. There are no drains within the unit, however, there are storm sewer drains within 100 feet (Huff & Huff, 1987).
History of Documented Releases:	No releases from this SWMU have been documented.
Observations:	The unit contained about 20 empty drums during the VSI, and no hazardous wastes were noted. During an IEPA inspection, this unit contained about 40 drums of mixed spent F003 solvents and six

drums of waste paint (D001) (IEPA, 1986a). There was no evidence of release during the VSI.

SWMU 5	**Drum Storage Area #3**
Unit Description:	This unit is located outdoors, at the intersection of the sheet metal building and brick building, adjacent to the facility walls. The unit has an asphalt surface. The size of the unit is unknown, but an IEPA inspection indicated that several drums were stored here (IEPA, 1986a). The unit was not declared in the facility's Part A application, and no further information was found (See Photograph 6).
Date of Startup:	The startup date of this unit is unknown.
Date of Closure:	This area has been inactive for at least 2 years.
Wastes Managed:	The above referenced IEPA inspection noted storage of seven drums of 1,1,1-trichloroethane, but it is unclear whether this was product or waste. No further information regarding storage of wastes in this unit was found.
Release Controls:	The unit has no secondary containment. A storm sewer drain is located within 50 feet of this unit.
History of Documented Releases:	No releases from this SWMU have been documented.
Observations:	No wastes were present in this SWMU during the VSI, and there was no evidence of release. This area is currently a paved parking lot.

SWMU 6	**Wastewater Treatment System**
Unit Description:	The wastewater treatment system is indoors, adjacent to the seven-stage parts washer. The unit treats rinsewater from the parts washer before it is discharged to the sanitary sewer (MWRDGC). The unit consists of a trough, sump, holding tank, treatment tank, and filter press. Rinsewater drains from parts washer tanks into the unit about once per week. The rinsewater is released from the tanks into a trough and collects in a nearby sump, where pH treatment was formerly performed. Currently, the sump is used for collection only. When the sump is full, the rinsewater is pumped to a 2,000-gallon holding tank. After 1,000 gallons of rinsewater accumulate in the holding tank, this volume is pumped into the 1,000-gallon treatment tank. The treatment consists of adding caustic or acid solutions to adjust the pH between 5 and 10, settling of solids by adding of flocculant, and filtering solids through a filter press. (Photographs 7, 8, 9, 10).
Date of Startup:	The unit began operation in 1988 (Henry Valve, 1992).
Date of Closure:	The unit is active.
Wastes Managed:	This unit manages acidic rinsewater (D002) from the seven-stage parts washer. The unit formerly managed chromic acid rinsewater (D002, D007). The resulting filter cake is stored on site, in cardboard containers, awaiting IEPA approval for disposal as a nonhazardous special waste (Henry Valve, 1992). Before the unit became active, the rinsewater was stored in the holding tank and hauled away for treatment by an approved waste hauler. The treated effluent is discharged to the sanitary sewer.
Release Controls:	A metal grating covering the trough and sump would allow spills to the concrete floor to flow into SWMU 6 for treatment. There are no floor drains in this area.

History of Documented Releases: No releases from this SWMU, other than the off-standard effluent release to the sanitary sewer, have been documented.

Observations: During the VSI, the unit contained approximately 1,000 gallons of rinsewater in the holding tank. The concrete floor was in good condition, with no apparent cracks. The unit was inactive at the time of the VSI, pending correction of the problem of copper in the effluent exceeding MWRDGC standards. No evidence of release was noted.

SWMU 7 **Waste Paint Area**

Unit Description: The waste paint area is in the northeastern corner of the building, where copper parts are painted. The unit works with the spray painting booths to recover waste paint solids generated during painting operations. Water continuously flows down the interior walls of the spray paint booth, washing excess paint into an open rectangular tank. The paint solids are filtered from the water and collected in a drum next to the tank. The unit is made of steel and rests on the concrete floor of the facility. The tank has a capacity of about 500 gallons. There are no drains in this area (Huff and Huff, 1987).

Date of Startup: The unit has been in operation since about 1970 (Henry Valve, 1992).

Date of Closure: The unit is active.

Wastes Managed: This unit manages waste paint (D001) generated in spray booths. The waste paint (D001) is hauled away for disposal by a licensed waste hauler, and the water is recycled.

Release Controls: The unit has no release controls.

History of Documented Releases:	No releases from this SWMU have been documented.
Observations:	The unit was operating during the VSI. About one half of one drum was filled with waste paint solids. The unit appeared to be in good condition, and the concrete floor in the area was free of cracks. BVWST observed no evidence of release from this unit.

4.0 AREAS OF CONCERN

BVWST identified one AOC during the PA/VSI. This AOC is discussed below; its location is shown in Figure 2.

AOC 1 **Machine Oil Tank**

The machine oil tank is underground, beneath the northeastern corner of the building. This 1,500-gallon steel tank is used to store product oil. The tank is over 35 years old and is slated for removal in the spring of 1992. A closure plan is expected to be written and approved before any removal activities take place.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The PA/VSI identified seven SWMUs and one AOC at the Henry Valve facility. Background information on the facility's location, operations, waste generating processes, history of documented releases, regulatory history, environmental setting, and receptors is presented in Section 2.0. SWMU-specific information, such as the unit's description, dates of operation, wastes managed, release controls, history of documented releases, and observed condition, is presented in Section 3.0. AOCs are discussed in Section 4.0. Following are BVWST's conclusions and recommendations for each SWMU and AOC. Table 3 at the end of this section summarizes the SWMUs and AOC at the Henry Valve facility and the recommended further actions.

SWMU 1 **Degreaser Tank**

Conclusions: The unit has a low potential for release to ground water, surface water, air and on-site soils. The unit manages relatively small quantities of waste and is indoors. The concrete floor beneath the tank is in good condition and spill containment equipment is nearby.

Recommendation: BVWST recommends no further action for this SWMU.

SWMU 2 **Waste Storage Area**

Conclusions: The unit has a low potential for release to ground water, surface water, air and on-site soils. A large spill of wastes is unlikely because few drums occupy this area.

Recommendation: BVWST recommends no further action for this SWMU.

SWMU 3 **Drum Storage Area #1**

Conclusions: The unit has low potential for release to ground water, surface water, air, and on-site soils. No wastes are stored in this area. The past potential for release from these areas was low because drums were stored on the indoor concrete surface for less than 90 days.

Recommendation: BVWST recommends no further action for this SWMU.

SWMU 4 **Drum Storage Area #2**

Conclusions: The unit has low potential for release to ground water, surface water, air, and on-site soils. No wastes are stored in this areas. The past potential for release from these areas was low because drums were stored on the concrete surface for less than 90 days, and this unit has sound secondary containment.

Recommendation: BVWST recommends no further action for this SWMU.

SWMU 5 **Drum Storage Area #3**

Conclusions: The unit has low potential for release to ground water, surface water, air, and on-site soils. No wastes are stored in this area. The past potential for release from this area was low because drums were stored on the asphalt surface for less than 90 days.

Recommendation: BVWST recommends no further action for this SWMU.

SWMU 6 **Wastewater Treatment System**

Conclusions: The unit has low potential for release to ground water, surface water, air and on-site soils. The unit is located on an indoor concrete floor in good condition, and any spills flow back into the unit for treatment.

Recommendations: BVWST recommends no further action for this SWMU.

SWMU 7 **Waste Paint Area**

Conclusions: The unit has low potential for release to ground water, surface water, air and on-site soils. The unit manages small quantities of waste and is in good condition on a concrete floor.

Recommendation: BVWST recommends no further action for this SWMU.

AOC 1 **Machine Oil Tank**

Conclusions: The underground machine oil tank has potential for release to ground water and on-site soils, although no release has been documented. This AOC has little or no potential for release to air or surface water because the tank is below ground and machine oil is not highly volatile. No surface water bodies are close enough to be affected by a spill.

Recommendation: BVWST recommends that the removal of this tank be performed in compliance with an IEPA approved closure plan.

TABLE 3

SWMU AND AOC SUMMARY

SWMU	Dates of Operation	Evidence of Release	Recommended Further Action
1. Degreaser Tank	1986 to present	None	None
2. Active Storage Area	Pre-1980 to present	None	None
3. Drum Storage Area #1	Pre-1989	None	None
4. Drum Storage Area #4	Pre-1989	None	None
5. Drum Storage Area #3	Pre-1989	None	None
6. Wastewater Treatment System	1988 to present	None	None
7. Waste Paint Area	Pre-1970 to present	None	None

AOC	Dates of Operation	Evidence of Release	Recommended Further Action
1. Machine Oil Tank	Pre-1955 to present	None	Carry out removal according to IEPA approved closure plan

REFERENCES

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IEPA, 1982b. Letter from Kenneth Bechely, Northern Region Manager, Field Operations Section, Division of Land and Noise Pollution Control to C.S. Albers. March 31.

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IEPA, 1986b. Letter from L.W. Eastep, Manager, Permit Section, Division of Land Pollution Control to Henry Valve.

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USGS, 1972. Elmhurst and River Forest 7.5 Minute Series Photorevised Quadrangle Maps.

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Wilman, H.B., 1971. "Summary of the Geology of the Chicago Area." Illinois State Geological Survey Circular 460; Urbana, Illinois.

ATTACHMENT A

EPA PRELIMINARY ASSESSMENT FORM 2070-12

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	IL D 005 071 741

II. SITE NAME AND LOCATION

01 SITE NAME *(Legal, common, or descriptive name of site)*	02 STREET, ROUTE NO. OR SPECIFIC LOCATION IDENTIFIER				
Henry Valve Company	3215 North Avenue				
03 CITY	**04 STATE**	**05 ZIP CODE**	**06 COUNTY**	**07 COUNTY CODE**	**08 CONG DIST**
Melrose Park	IL	60160	Cook		
09 COORDINATES: LATITUDE	**LONGITUDE**				
41° 54' 29" N	87° 52' 38" W				

10 DIRECTIONS TO SITE *(Starting from nearest public road)*
From I-290, take 25th Avenue north to North Avenue, North Avenue west to the site.

III. RESPONSIBLE PARTIES

01 OWNER *(if known)*	02 STREET *(Business, mailing residential)*		
Robert Henry	909 Campbell Street		
03 CITY	**04 STATE**	**05 ZIP CODE**	**06 TELEPHONE NUMBER**
Arlington Heights	IL	60005	(708) 253-5429
07 OPERATOR *(If known and different from owner)*	**08 STREET** *(Business, mailing, residential)*		
09 CITY	**10 STATE**	**11 ZIP CODE**	**12 TELEPHONE NUMBER**

13 TYPE OF OWNERSHIP *(Check one)*
☒ A. PRIVATE ☐ B. FEDERAL: _____ (Agency Name) ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL
☐ F. OTHER _____ (Specify) ☐ G. UNKNOWN

14. OWNER/OPERATOR NOTIFICATION ON FILE *(Check all that apply)*
☐ A. RCRA 3010 DATE RECEIVED: ___/___/___ (MONTH DAY YEAR) ☐ B. UNCONTROLLED WASTE SITE *(CERCLA 103 c)* DATE RECEIVED: ___/___/___ (MONTH DAY YEAR) ☐ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION
☒ YES DATE 01 / 27 / 92
☐ NO

BY *(Check all that apply)*
☐ A. EPA ☒ B. EPA CONTRACTOR ☐ C. STATE ☐ D. OTHER CONTRACTOR
☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER: _____ (Specify)

CONTRACTOR B&V Waste Science and Techonology Corp. (BVWST)

02 SITE STATUS *(Check one)*
■ A. ACTIVE ☐ B. INACTIVE ☐ C.UNKNOWN

03 YEARS OF OPERATION
1949 | Present (BEGINNING YEAR ENDING YEAR) ☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED

Methylene chloride still bottoms, spent acids, acidic rinse water, and waste paint are hazardous wastes generated at the facility.

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

None.

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION *(Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents.)*

☐ A. HIGH *(Inspection required promptly)* ☐ B. MEDIUM *(Inspection required)* ■ C. LOW *(Inspect on time-available basis)* ☐ D. NONE *(No further action needed; complete current disposition form)*

VI. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF *(Agency/Organization)*			03 TELEPHONE NUMBER
Kevin Pierard	U.S. EPA			(312) 886-4448
04 PERSON RESPONSIBLE FOR ASSESSMENT	**05 AGENCY**	**06 ORGANIZATION**	**07 TELEPHONE NUMBER**	**08 DATE**
Matt Mastronardi		BVWST	(312) 346-3775	01/27/92 (MONTH DAY YEAR)

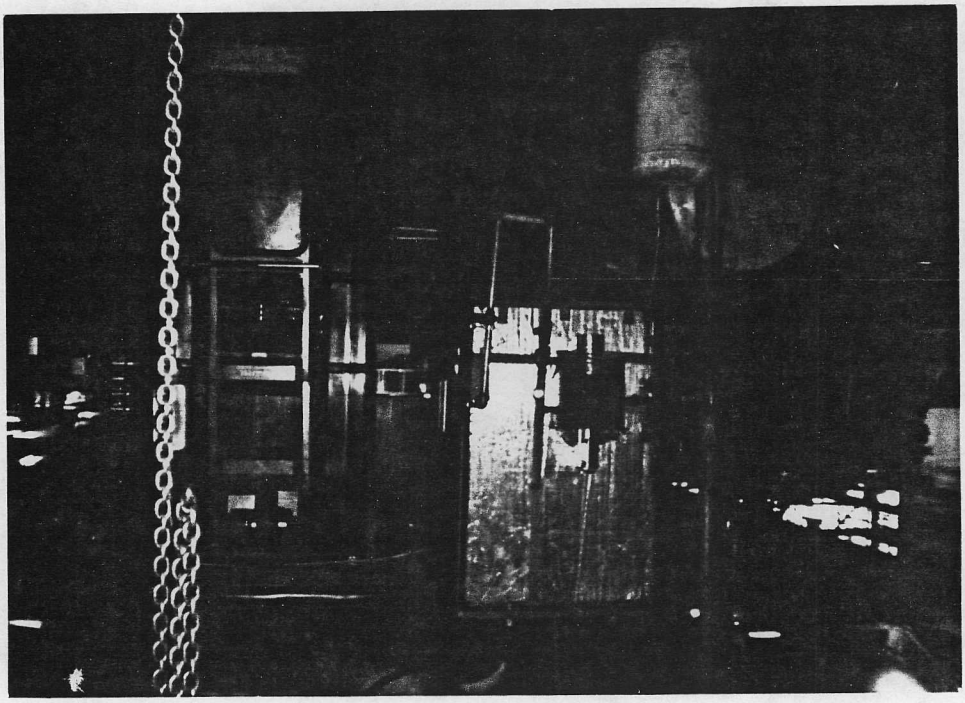
ATTACHMENT B

VISUAL SITE INSPECTION SUMMARY AND PHOTOGRAPHS

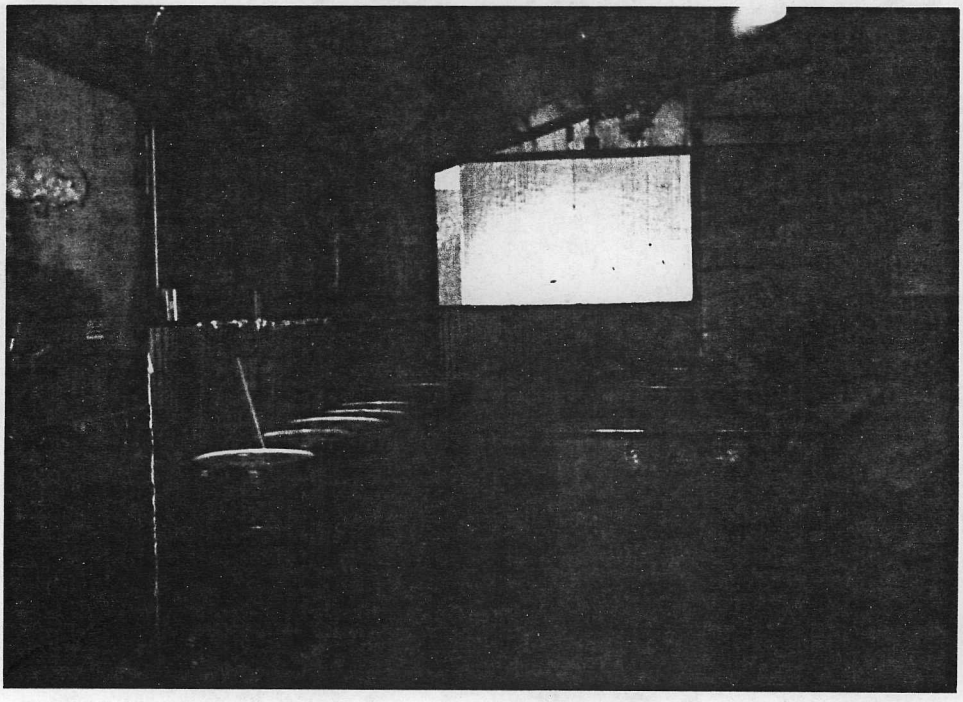
VISUAL SITE INSPECTION SUMMARY

Henry Valve
Melrose Park, Illinois
ILD 005 071 741

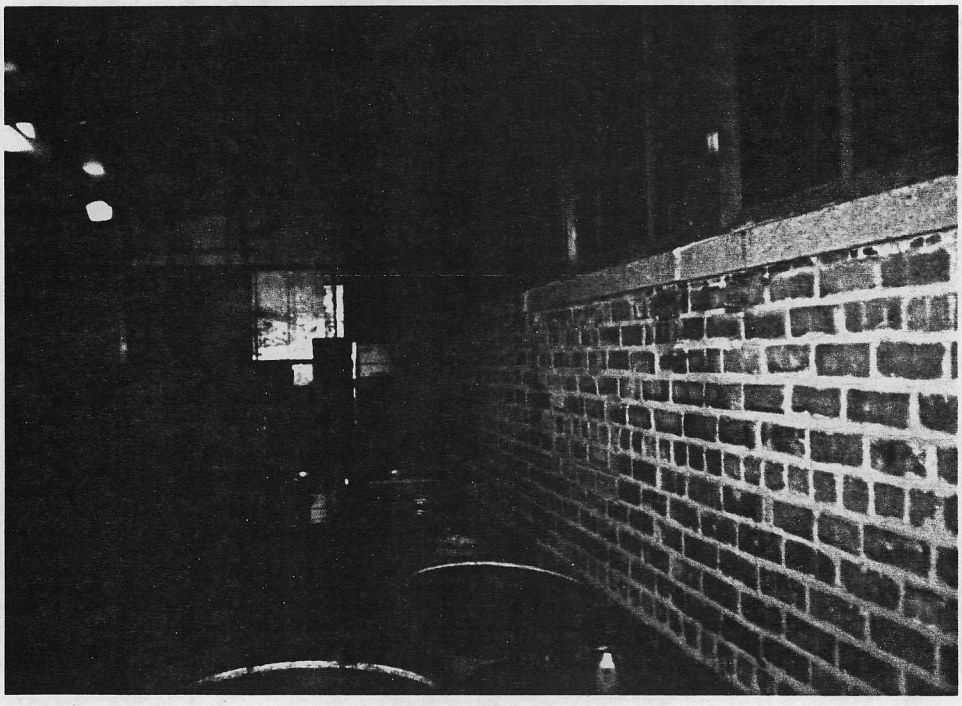
Date:	January 27, 1992
Facility Representatives:	Dave Palla, Manufacturing Engineer Jack Revels, Manufacturing Manager James Huff, Environmental Consultant, Huff & Huff Environmental Consultants
Inspection Team:	Matt Mastronardi, B&V Waste Science and Technology Corp. (BVWST) Miguel Sanchez, BVWST
Photographer:	Matt Mastronardi
Weather Conditions:	Windy, overcast, temperature about 30 °F
Summary of Activities:	The visual site inspection (VSI) began at 10:00 a.m. with an introductory meeting. The inspection team discussed the purpose of the VSI and the agenda for the visit. Facility representatives then discussed Henry Valve's past and current operations, solid wastes generated, and release history. Most of the information was exchanged on a question and answer basis. The VSI tour began at 11:00 a.m. The inspection team observed the loading dock area where product materials are received. Dave Palla then led the inspection team to SWMU locations identified during the PA and introductory meeting. The floor of the facility was continuous concrete, in good condition. The inspection team observed the degreaser that removes machining oils from metal parts and photographed SWMU 1, which collects the waste from this process. Past and current indoor waste storage areas were then observed and photographed (SWMUs 2 and 3). The wastewater treatment system (SWMU 6), which was inactive at the time of the VSI, was photographed. The inspection team proceeded to the spray painting booths and observed and photographed the waste paint recovery system and the surrounding area (SWMU 7). Former outdoor storage areas (SWMUs 4 and 5) were inspected and photographed. The inspection team left the facility for a lunch break and returned to collect copies of information requested during the introductory meeting. The VSI was completed at 1:45 p.m.



Photograph No. 1 Location: SWMU 1
Orientation: North Date: January 27, 1992
Description: Methylene chloride still bottom tank at left, labeled ME/CL. Degreaser is at right.

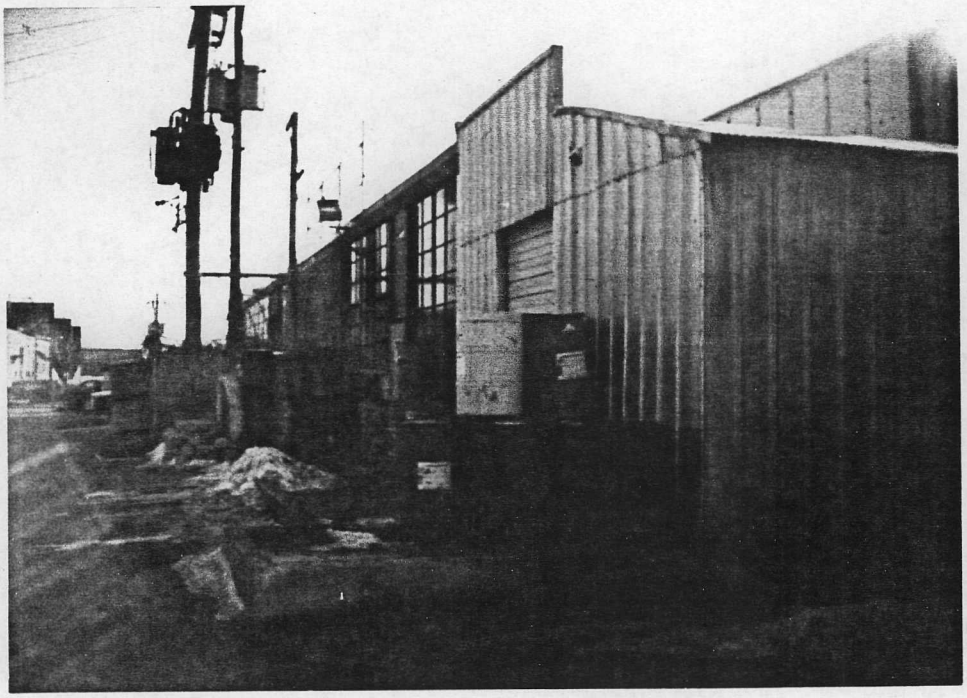


Photograph No. 2 Location: SWMU 2
Orientation: North Date: January 27, 1992
Description: Waste storage area; drums of spent solvent are at left; some bins of metal chips are at right.

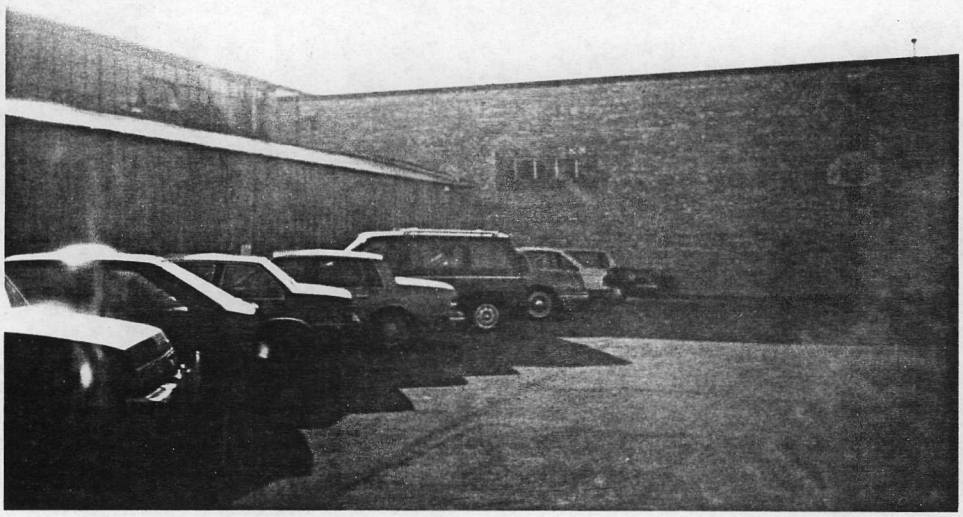


Photograph No. 3 Location: SWMU 2
Orientation: North Date: January 27, 1992
Description: Right side of waste storage area. Coverless drums against brick wall contain waste metal chips.

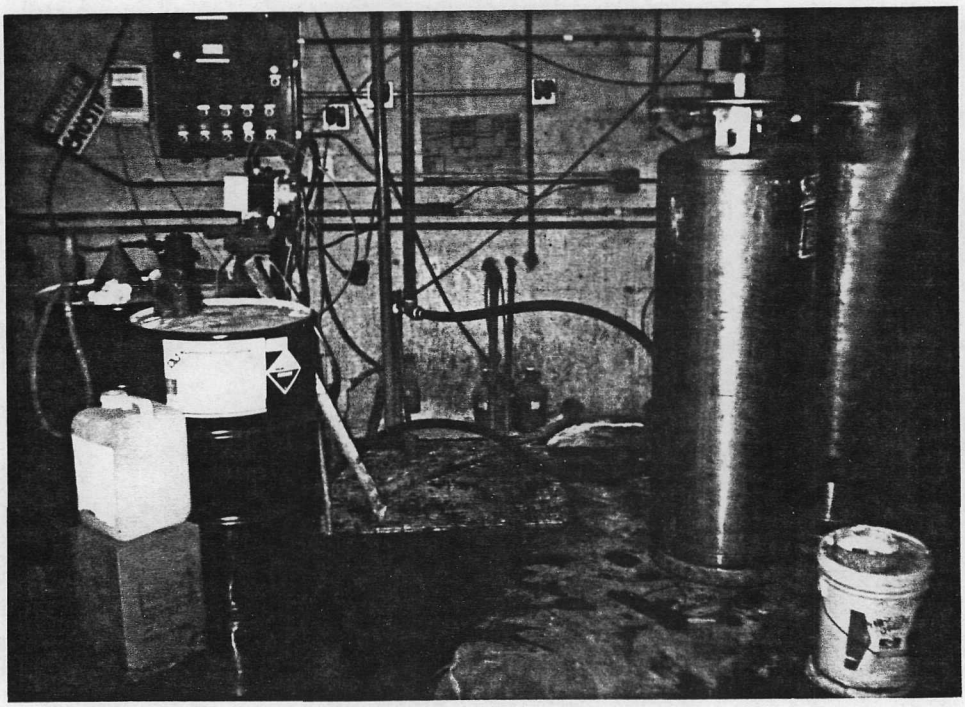
Photograph No. 4 Location: SWMU 3
Orientation: East Date: January 27, 1992
Description: Inactive indoor drum storage area (drum storage area #1), against east wall of facility, formerly used for storage of drums of methylene chloride still bottoms. Currently used for storage of non-hazardous product materials.



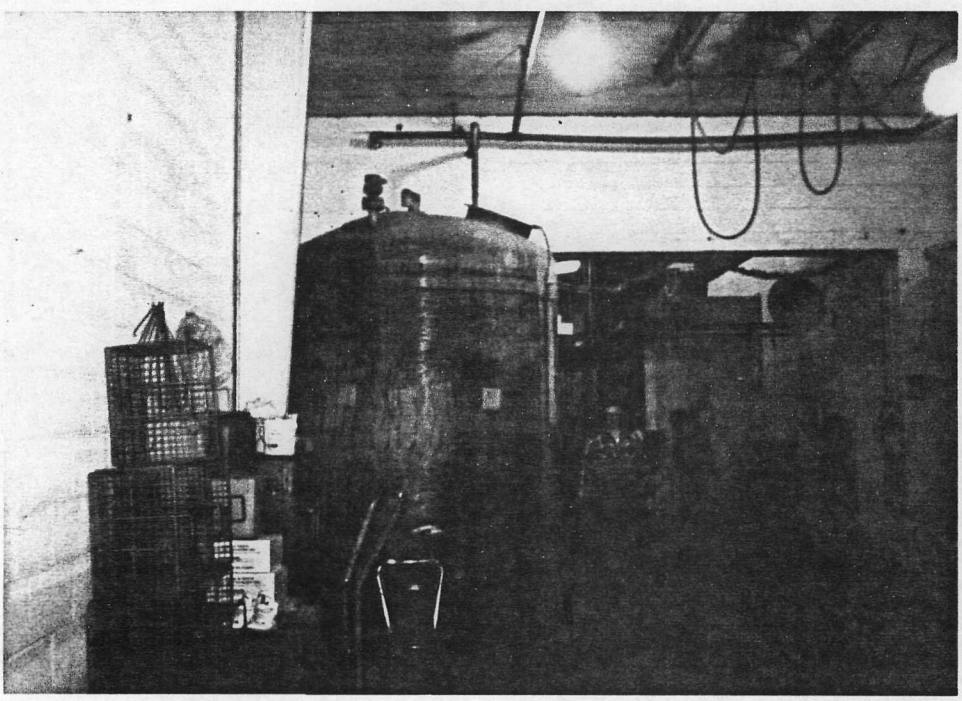
Photograph No. 5 Location: SWMU 4
Orientation: Southeast Date: January 27, 1992
Description: Inactive outdoor drum storage area (drum storage area #2), against south wall of facility. Note concrete containment dike. Empty product drums await pick-up for recycling.



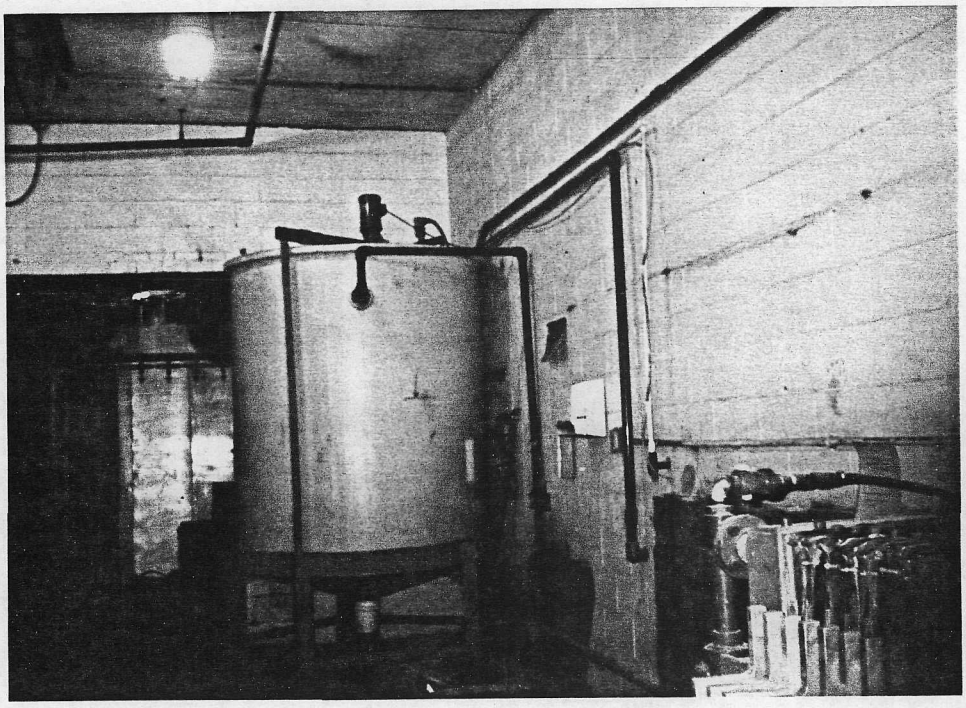
Photograph No. 6 Location: SWMU 5
Orientation: South Date: January 27, 1992
Description: Inactive outdoor drum storage area (drum storage area #3) at intersection of sheet-metal and main building. Currently used for parking only.



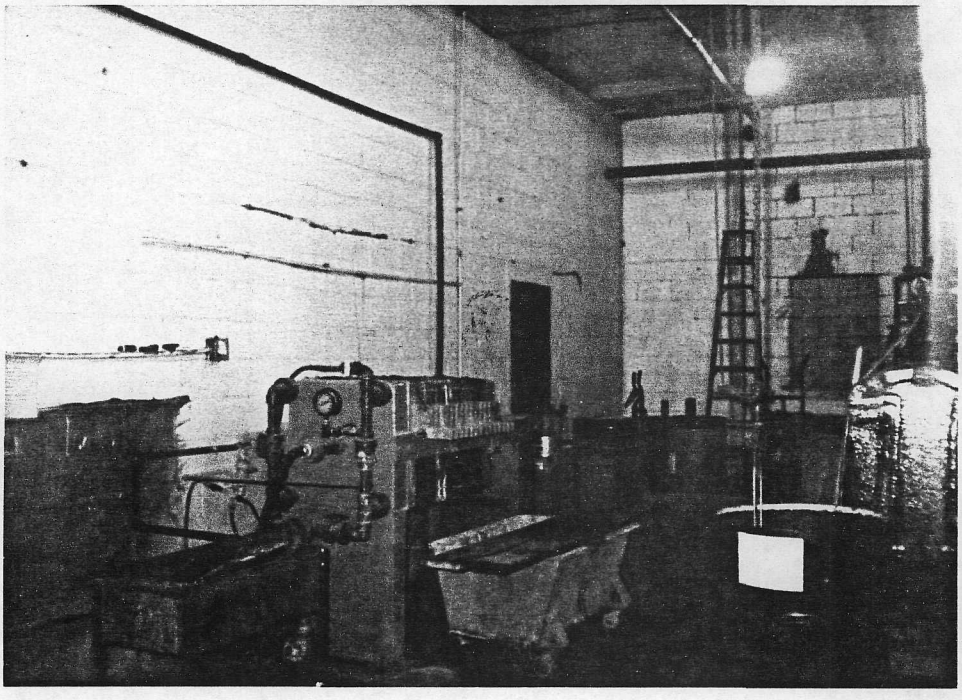
Photograph No. 7 Location: SWMU 6
Orientation: East Date: January 27, 1992
Description: Concrete sump which collects waste rinsewater for treatment. Drums of acid and caustic are at left. A spill of coolant water from a brazing operation is draining into the sump at left.



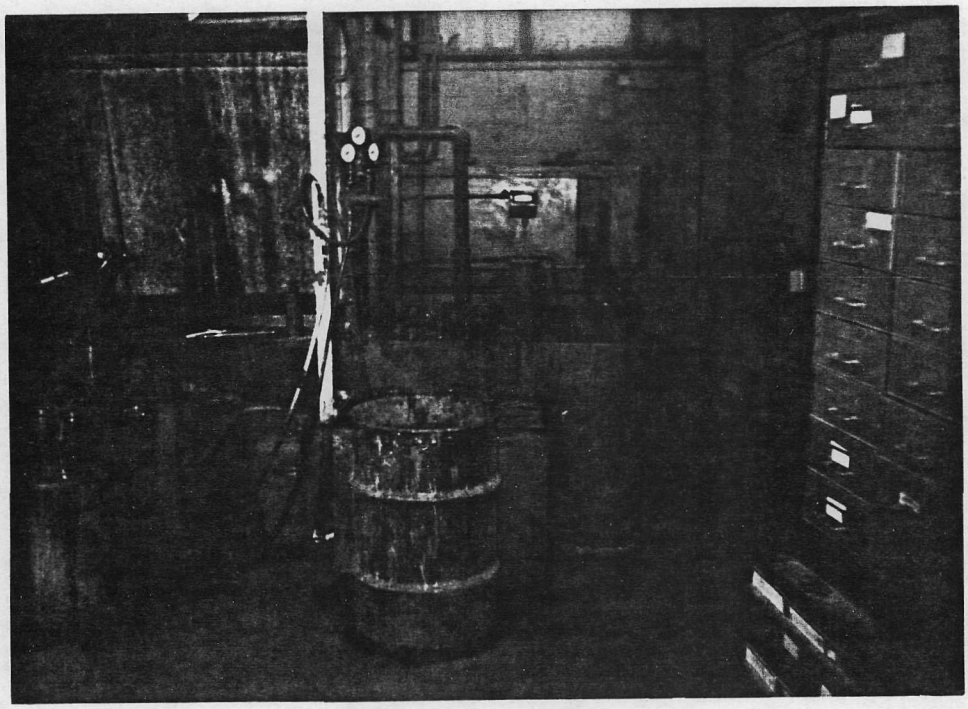
Photograph No. 8 Location: SWMU 6
Orientation: South Date: January 27, 1992
Description: 2,000-gallon holding tank where waste rinsewater is stored prior to treatment.



Photograph No. 9 Location: SWMU 6
Orientation: South Date: January 27, 1992
Description: 1,000-gallon plastic tank used in treatment of waste rinsewater.



Photograph No. 10 Location: SWMU 6
Orientation: Northeast Date: January 27, 1992
Description: Filter press used to filter solids from treatment.



Photograph No. 11 Location: SWMU 7
Orientation: NA Date: January 27, 1992
Description: Waste paint area. Spray booth is at left and the tank used for separation and filtration is at center, connected to the booth. Note drum in foreground used for collection of paint solids.

ATTACHMENT C

VISUAL SITE INSPECTION FIELD NOTES

Projects (continued)

Preliminary Assessment / Visual Site Inspection

Location:

Henry Valve Company
3215 North Ave.
Melrose Park, IL 60160
U.S. EPA I.D. No. ILD005071741

BUWST Representatives:

- Matt Mastronardi
- Miguel A. Sanchez

Henry Valve Co. Representatives:

- L. Jack Revels
  Manager of Manufacturing
- James E. Huff
  Huff & Huff, Inc.
  Environmental Consultants
- David Palla

Miguel A. Sanchez 01/27/92

01/27/92

1000 Arrived at the facility. Met James E. Huff (HUFF & HUFF, INC) and C. Jack Revels (HENRY VALVE COMPANY), and Dave Palla (HENRY VALVE COMPANY).

1005 J.E. HUFF asked BUUST to give him a brief summary of the purpose of our visit and the ~~how~~ reason m.d. HENRY VALVE CO. got selected for their ~~PICKER~~ m.d. RFA.

1010 H.E. HUFF asked about return visits to the facility for sampling.

1015 Start of facility operations somewhere in the late 50's. Exact date will be given at a later time.

R Commercial & Industrial surrounding land use: Nowgston West. Hawthorne AVE. to the m.d. East, Golden Dipt accross the street.
Size of bldg & acres = unsure.
Employees ≈205.
Past operations = need more info.
Steel, casting, brasses. Do machining here only. No plating operations.

Miguel A. Sanchez

overcast
Cold

01/27/92

Production processes: milling, drilling, turning.

1025 Spent solvent → bright dipping operation → wastwater → sludge, cake filter ~~type~~ oxydize surface with thin film of chrome → no longer generated since 1991
Matt asked for Manifest of waste

1026 111-trichlorethane → stopped in 1991.
Matt asked for Manifest.

m.d. for 1027 Spent solvent → get picture of the area. Wastwater still generated but doesn't have chrome in it.

1028 Shelsaut → Napco 340 or 360 Trademark Solvent. No longer purchased. Some on site as waste that must be shipped out → in drums.

1029 Waste oil → still have → machine cleaning operations.

1030 Lacker thinner → painting valves → still generated. Only one drum per month, but Going into powdered paint. Need manifest.

1031 Cold vapor degreaser → Parts are oily → heating coil evaporates methaline chloride. Need picture of this. A cooling coil then causes the Methylene Chloride to condense on the part.

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Vapour degreaser since 1986.

1034 Drum storage area → for all haz. waste.

1035 Tank storage → Chromic acid → Sump from Waste water Treatment system Exempt from RCRA

1037 3 rinse lines on the bright dipping operations. Overflow of rinse tanks. Replaced chrome w/ copper, but still have acids in the process.

1040 No reported releases.

1041 Get new sketch → more updated.

1045 Lake Michigan water → no knowledge of wells.

1048 "ENVIRONMENT" INCIDENT CONTROL PLAN" dated March 1987 → get copy

1058 Recycle scrap metal centrifuge to remove oils

1059 Tours starts → see loading area → all concrete.

1100 Screw Machine

1105 Raw casting to a complete machine part in CNC's = Computer Numerical Control

1103 Vapor degreaser (Green)

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Photo #1 taken of Vapor degreaser of parts washer for Methylene Chloride. Picture taken facing NW.

1106 Assembly operations to the N.W. of site

1107 Raw castings seen: Metal & brass chips in drums sent off site to be recycled.

1109 Photo #2 of brass chips in drums. Orientation = N, NE.

1110 Haz. waste accumulation area in steel drums. Labeled and dated. Photo #3 taken facing N, NW. of this. 9 drums of waste (approx 1 month's worth). "U22372" on drums. Contents = Waste oil and dirty solvents.

1115 Copper bright operation.

1116 WWT system Pit. in ground → Acid and copper. Previously chrome. Adjust PH. Then pumped to 2,000 gal holding tank. Pit is fiberglass lined w/ surrounding conc. Photo #4 taken facing of Pit in ground.

1120 Photo #5 taken of 2000 gal holding tank.

1124 5 stage parts washer. Preparation

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of parts for ~~powder~~ m.d. painting. Everything goes to sewer → ~~at~~ m.d. phosphate. Tested 2 times/year. No real wastes.

1128 Painting area by 4 guns. Accumulation area. One drum of waste paint → from cleaning of guns at the end of the work day. Photo # 6 taken of this.

1132 Photo # 7 taken of previous drum storage area. There is castings, rough parts storage currently in this area over conc. floor.

1135 FRED DOPPELT CO. ~~to~~ m.d. hauls off scrap metals 2 → Glenview, IL

1137 Photo # 8 → Empty drums, both poly and steel. Curb around the conc. staging area. Denoted as a drum storage area in a schetch in the files.

1140 Photo # 9 → asphalt parking lot. Nothing there. Adjacent to bldg.

1142 Site Tour over. Go back to confrence room. Matt asked for a copy

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of the contingency plan.

1145 Scrubber in bright dip room → water goes through treatment system.

1148 91,092 sq. ft. bldg.

1149 Looking through manifests.

1150 Henry Valve m.d. Looking into removing degreasers, will use only water based solvents.

1155 Recieved a copy of some Manifests, and Contingency Plan.

1205 Lunch break

1315 Back at the facility

1325 In conference room w/ L. Jack Ravels. Asked about U.S.T. for machine oil. Fiberglass lined → used for bulk new oils (not used for wastes). Jack R. not sure of construction of tank, he will ~~go~~ m.d. try to get some info. on it.

1345 Left Henry Valve Co. to go return rental car and return to BUUST office; VSI over.

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